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1. The L-1 set was a training set for the direction finding of aircraft. It was based on the principle that the trainee had to take the bearings of a moving aircraft model. If he located the plane, a scale indicated its altitude, and flaring lights showed its speed. The set looked rather primitive and was to be produced at a cost of 10,000 DM (East).
 2. The A-1 set was a training set for fighter pilots. It consisted of the instructor's switch desk, the simulated pilot's seat and control stick of the trainee, a screen, and a projecting lantern or cinematographic projector*.
 - a. A moving plane, the location of which could be changed by the instructor, was projected on the screen. By a reflector sight the trainee had to try to take aim at the moving plane and fire at the prescribed distance. Since the plane was constantly moving it was the problem of the trainee to get the correct firing position by operating his switches. His controls and the projected image were coupled electrically. If the trainee made mistakes in operating the controls the plane disappeared from the screen.
 - b. The set was to be delivered at a cost of 65,000 DM (East). A preliminary order for 200 sets was placed for 1950.
 - c. Apart from the definite working-out of the circuit diagrams and the descriptions, the construction work for this set was completed. The original difficulties of co-relating the movements of the plane on the screen and the effect of the control actions to conditions existing in reality were successfully solved, according to source. It was decided to build the set in two versions:
 - (1) Type A-1k (endless motion picture film) utilized two projectors, one reproducing the landscape (horizon, mountains, etc.), the other the moving aircraft. [REDACTED] all the known aircraft types could be projected.

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(2) Type A-1p using lantern slides.

d. The optical units for the first three experimental sets were almost completed. The date for delivery was fixed by the Soviets at 15 November 1949.

a series of 100 A-1p and A-1k units each was to be produced after the successful testing of the prototypes.

3. For details of the sight of set A-1, see Annex 1, sketches 1 and 2. For details of cinematographic projector with double mirror arrangement in set A-1k, see Annex 2, sketch 3; for details of lantern slide projector with panoramic optics (Pankrat), see reverse side of Annex 2 (sketch 4). The thickness of the optical units of the lenses is entered in the sketch, "r" indicating the radius of the lenses. The types of glass used are stated behind the radii (e.g., BK-7 or SK-18) (Annexes 1 and 2 are being forwarded in the German original).

4. The optical data

only two copies of which were kept by the Zeiss firm. The definite form of the graduated range plate was not yet decided upon. In order to avoid mistakes an A-1 set was previously known. This set was designed by Dr. HILINGER at the VEB-LEW (formerly AEG) Plant in BERLIN-HENNIGSDORF (VEB - Volkseigener Betrieb - Nationalized Plant; LEW - Landes Elektrizitaetswerk - State Power Plant). The A-1 set presently produced by the ZEISS Firm is a completely new design.

Comment:

Report on air force training equipment developed by the Zeiss

The optical systems of the pertinent sets with the required data on the types of lenses, focal distances, and other distances are reproduced in the attached sketches.

From the sketched bomb sight (sketches 1 and 2 of Annex 1) it is inferred that the definite form of the graduated range plates, respectively spirals has not been decided by the Soviets.

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